
**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 1**

What a Patent Is and How One is Obtained

This is a patent case. Before summarizing the positions of the parties and the issues involved in the dispute, let me take a moment to explain what a patent is and how one is obtained.

Patents are granted by the United States Patent and Trademark Office (sometimes called “the PTO”). A valid United States patent gives the patent holder the right for up to 20 years from the date the patent application was filed or 17 years from the date the patent issued to prevent others from making, using, offering to sell, or selling the patented invention within the United States, or from importing it into the United States, without the patent holder’s permission. In this case, the patent held by the plaintiff was applied for on January 7, 1994, and the patent issued on July 23, 1996. Therefore, this patent will expire on January 7, 2014, the latter of the two dates I’ve just described.

A violation of the patent holder’s rights is called infringement. The patent holder may try to enforce a patent against persons believed to be infringers by a lawsuit filed in federal court.

The process of obtaining a patent is called patent prosecution. To obtain a patent, one must first file an application with the PTO. The PTO is an agency of the Federal Government and employs trained Examiners who review applications

for patents. The application includes what is called a “specification,” which contains a written description of the claimed invention telling what the invention is, how it works, how to make it, and how to use it. The specification concludes with one or more numbered sentences. These are the patent “claims.” When the patent is eventually granted by the PTO, the claims define the boundaries of its protection and give notice to the public of those boundaries.

After the applicant files the application, an Examiner reviews the application to determine whether or not the claims are patentable (appropriate for patent protection) and whether or not the specification adequately describes the invention claimed. In examining a patent application, the Examiner reviews certain information about the state of the technology at the time the application was filed. The PTO searches for and reviews information that is publicly available or that is submitted by the applicant. This information is called “prior art.” The Examiner reviews this prior art to determine whether or not the invention is truly an advance over the state of the art at the time. Prior art is defined by law, and I will give you, at a later time during these instructions, specific instructions as to what constitutes prior art. However, in general, prior art includes information that demonstrates the state of technology that existed before the claimed invention was made or before the application was filed. A patent lists the prior art that the Examiner considered; this list is called the “cited references.”

After the prior art search and examination of the application, the Examiner informs the applicant in writing of what the Examiner has found and whether the

Examiner considers any claim to be patentable and, thus, “allowed.” This writing from the Examiner is called an “Office Action.” If the Examiner rejects the claims, the applicant has an opportunity to respond to the Examiner to try to persuade the Examiner to allow the claims, and to change the claims or to submit new claims. This process may go back and forth for some time until the examiner is satisfied that the application meets the requirements for a patent and the application issues as a patent, or that the application should be rejected and no patent should issue. Sometimes, patents are issued after appeals within the PTO or to a court. The papers generated during these communications between the Examiner and the applicant are called the “prosecution history.”

The fact that the PTO grants a patent does not necessarily mean that any invention claimed in the patent, in fact, deserves the protection of a patent. For example, the PTO may not have had available to it all other prior art that will be presented to you. A person accused of infringement has the right to argue here in federal court that a claimed invention in the patent is invalid because it does not meet the requirements for a patent. It is your job to consider the evidence presented by the parties, and determine independently whether or not a party alleged to have infringed the patent has proven that the patent is invalid.

Source: Federal Circuit Bar Association Model Patent Jury Instruction, Preliminary Instruction A.1 (modified)

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 2**

The Parties and Their Claims

Global Traffic Technologies, LLC (or GTT) is the plaintiff in this action. GTT is the owner of a patent –U.S. Patent No. 5,539,398. Patents are often referred to by their last three digits, and I will refer to the patent owned by GTT as the ‘398 Patent. GTT filed this case because it contends that the Defendants infringed claims of its patent, and that it is entitled to damages for that infringement.

There are a number of named defendants in this action: KM Enterprises, Inc., STC, Inc., and Emtrac Systems, Inc.* are corporate entities. Defendants have also sued an individual (Rodney Morgan). GTT alleges that Defendants are all liable for infringement of its ‘398 Patent.

For their part, all Defendants allege that the asserted claims of the ‘398 Patent are not infringed and, moreover, that the patent itself is invalid and unenforceable.

To fulfill your duties as jurors, you must decide whether the claims of the ‘398 Patent have been infringed and whether those claims are invalid or unenforceable, using the legal standards that I shall describe for you. If you decide that any claim of the ‘398 Patent has been infringed and that the claim is not invalid or unenforceable, you will then need to decide any money damages to

be awarded GTT to compensate for the infringement. You will also need to decide whether the infringement was willful. If you decide that any infringement was willful, that decision should not affect any damage award you give. I will take willfulness into account later in the proceedings.

It is my job as judge to determine the meaning of any claim language that needs interpretation. You must accept the meanings I give you and use them when you decide whether any claim of the patent has been infringed and whether any claim is invalid.

*Emtrac Systems was administratively dissolved prior to the commencement of this action. Because it is no longer in existence, it cannot be held liable for infringement. Accordingly, Defendants believe that Emtrac Systems should not be referenced in either the jury instructions or the verdict form.

Source: National Jury Instruction Project, Model Patent Jury Instructions, Instruction 1.3 (modified)

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 3**

Outline of Trial

The trial is about to begin, but before we begin, I want to take a few minutes to give you some initial instructions about this case and your duties as jurors. At the end of the trial, I will give you further instructions. I may also give you instructions during the trial. Unless I specifically tell you otherwise, all such instructions are equally binding on you and must be followed.

Here is how the trial will proceed. First, each side may make an opening statement. An opening statement is not evidence. It is simply an opportunity for the lawyers to explain what they expect the evidence will show.

After opening statements, the patent holder will present its evidence in support of its contention that the claims of its patent have been infringed. To prove infringement of any claim, the patent holder must persuade you that it is more likely than not that the alleged infringer infringed that claim. This is the standard for proving something by a preponderance of the evidence.

After the patent holder presents its evidence, Defendants will present their evidence that the claims of the '398 Patent are invalid or unenforceable. To prove invalidity or unenforceability of any claim, Defendants must persuade you by clear and convincing evidence that the claim is invalid or unenforceable – that is,

Defendants must present evidence that leaves you with a clear conviction that the fact has been proven.

The clear and convincing standard requires a higher degree of proof than proof by a preponderance of the evidence. Both the preponderance of the evidence and the clear and convincing standard are different from what you may have heard about in criminal proceedings where a fact must be proven beyond a reasonable doubt. On a scale of these various standards of proof, as you move from preponderance of the evidence (where the proof need only be sufficient to tip the scale in favor of the party proving the fact) to proof beyond a reasonable doubt (where the facts must be proven to a very high degree of certainty), you may think of clear and convincing evidence as being between the two standards.

Following the initial presentation of evidence, both parties will have an additional opportunity to present rebuttal evidence.

After all the evidence has been presented, the attorneys will make closing arguments and I will give you final instructions on the law that applies to the case. These closing arguments by the attorneys are not evidence. After the closing arguments and instructions, you will then decide the case.

Source: Federal Circuit Bar Association Model Patent Jury Instruction, Instruction A.5 (Outline of Trial) (modified).

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 4**

Evidence; Limitations

During the trial you will see and hear evidence. "Evidence" includes the testimony of witnesses; documents and other things received as exhibits; any facts that have been stipulated – that is, formally agreed to by the parties; and any facts that have been judicially noticed – that is facts which I say you must accept as true.

Certain things are not evidence. Among these things are:

1. Statements, arguments, questions and comments by the lawyers are not evidence.
2. Exhibits that are identified by a party but not offered or received in evidence are identified.
3. Objections made by lawyers are not evidence. Lawyers have a right and sometimes an obligation to object when they believe something is improper. If I sustain an objection to a question or an exhibit, you must ignore the question or the exhibit and must not try to guess what the information might have been.
4. Testimony and exhibits that I may strike from the record, or tell you to disregard are not evidence.
5. And, finally, anything you hear outside the courtroom is not evidence.

Sometimes particular items of evidence are offered or received for a limited purpose only. What this means is that the evidence can be used by you only for one particular purpose, and not for any other purpose. I will tell you if this occurs, and instruct you on the purposes for which the item can and cannot be used, and you should follow my instruction carefully.

Finally, some of you may have heard the terms “direct evidence” and “circumstantial evidence.” You are instructed that you should not concern yourself with those terms, since the law makes no distinction between the weight to be given to direct or circumstantial evidence.

Source: See 8th Cir. Civil Jury Instr. 1.04 (2013); 3 Kevin F. O’Malley et al., *Federal Jury Practice and Instructions*, § 101.44 (6th ed.).

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 5**

Credibility of Witnesses

You are responsible for deciding the facts based on the evidence presented to you. In deciding the facts, you may have to decide which testimony to believe and which testimony not to believe. You may believe everything a witness says, part of it, or none of it. In considering the testimony of any witness, you may take into account many factors, including the witness' opportunity and ability to see or hear or know the things he or she is testifying about; the quality of the witness' memory; the witness' appearance and manner while testifying; the witness' interest in the outcome of the case; any bias or prejudice the witness may have; other evidence that may have contradicted the witness' testimony; and the reasonableness of the witness' testimony in light of all the evidence. The weight of the evidence does not necessarily depend upon the number of witnesses who testify.

Source: 3 Kevin F. O'Malley et al., *Federal Jury Practice and Instructions*, § 101.43 (6th ed.).

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 6**

Impeachment

A witness may be discredited or impeached by contradictory evidence or by evidence that at some other time the witness has said or done something, or has failed to say or do something that is inconsistent with the witness' present testimony.

If you believe any witness has been impeached and thus discredited, you may give the testimony of that witness such credibility, if any, you think it deserves.

If a witness is shown knowingly to have testified falsely about any material matter, you have a right to distrust such witness' other testimony and you may reject all the testimony of that witness or give it such credibility as you may think it deserves.

A witness can be said to have knowingly testified falsely if you are persuaded that the witness understood that the testimony given was false and did not misstate or omit something because of mistake or accident or other innocent reasons.

Source: 3 Kevin F. O'Malley et al., *Federal Jury Practice and Instructions*, § 101.43 (6th ed.) (modified).

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 7**

Expert Witnesses

The rules of evidence ordinarily do not permit witnesses to testify as to opinions or conclusions. There is an exception to this rule for "expert witnesses." An expert witness is a person who by education and experience has become expert in some art, science, profession, or calling. Expert witnesses may state their opinion as to matters in which they profess to be expert, and may also state their reasons for their opinions.

You should consider each expert opinion received in evidence in this case, and give it such weight as you think it deserves. If you should decide the opinion of an expert witness is not based upon sufficient education and experience, or if you should conclude the reasons given in support of the opinion are not sound, or if you find the expert's opinion is outweighed by other evidence, you may disregard the opinion entirely.

Source: 3 Kevin F. O'Malley et al., *Federal Jury Practice and Instructions*, § 101.40 (6th ed.).

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 8**

Deposition Testimony

During the trial, testimony may be presented through a deposition. A deposition contains the sworn, recorded answers to questions asked a witness before the trial. At the time the deposition testimony was taken, attorneys representing the parties questioned this witness under oath. A court reporter was present and recorded the testimony. A witness's testimony may sometimes be presented in the form of a deposition if the witness is not present or if the testimony in court contradicts the witness' deposition testimony.

You must give deposition testimony the same consideration as if the witness had been present and had testified from the witness stand in court.

Source: 3 Kevin F. O'Malley et al., *Federal Jury Practice and Instructions*, § 102.23 (6th ed.).

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 9**

Bench Conferences and Recesses

During the trial, it may be necessary for me to speak privately with the lawyers out of your hearing. I may talk to them here at the bench while you are in the courtroom, or I may call a recess and let you leave the courtroom while I talk with them. Please understand that while you are waiting, we are working. The purpose of these conferences is to decide how certain matters are to be treated under the rules of evidence which govern the trial, and to avoid confusion and error. We will do what we can to limit the number of these conferences and to keep them as short as possible.

Source: 3 Kevin F. O'Malley et al., *Federal Jury Practice and Instructions*, § 101.31 (6th ed.); 8th Cir. Civil Jury Instr. § 1.05 (2013).

**DEFENDANTS' REQUESTED PRELIMINARY JURY INSTRUCTION
NO. 10**

Glossary of Patent and Technical Terms

During the course of this trial, you will hear the lawyers refer to patent and technical terms frequently used in patent matters. Among the terms you may hear are these:

Application – The initial papers files by the applicant with the United States Patent and Trademark Office (also called the Patent Office or PTO)

Claims—The numbered sentences appearing at the end of the patent that define the invention. The words of the claims define the scope of the patent holder's exclusive rights during the life of the patent. Claims can be independent or dependent. An independent claim is self-contained. A dependent claim refers back to an earlier claim and includes the requirement of the earlier claim.

Prior art – Prior art is not art as you might generally understand the word art. Rather, prior art is a technical term relating to patents. In general, it includes things that existed before the claimed invention and might typically be a patent or a printed publication. I will give you a more specific definition of prior art later.

Prosecution history –The written record of proceedings between the applicant and the PTO, including the original patent application and later communications between the PTO and the applicant.

Specification – The information that appears in the patent and concludes with one or more claims. The specification includes the written text and the drawings (if any). In the specification, the inventor should provide a description telling what the invention is, how it works, how to make and use it so as to enable others skilled in the art to do so, and what the inventor believed at the time of filing to be the best way of making the invention.

Ordinary skill in the art – The level of experience, education, and/or training that those individuals who worked in the area of the invention ordinarily possessed at the time of the effective filing date of the patent application.

Source: National Jury Instruction Project, Model Patent Jury Instructions, Instruction 1.6 (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 1

Contentions of the Parties

As I did at the start of the case, I will first give you a brief summary of each side's contentions. I will then provide you with detailed instructions on what each side must prove to win on each of its contentions.

As you know, GTT, the patent holder in this case, contends that Defendants infringed its '398 Patent by making, using, selling and installing traffic control management systems, namely the Emtrac Priority Control System, in violation of its rights under its patent.

All Defendants deny that the Emtrac Priority Control System infringes GTT's '398 Patent, and they seek a judgment of non-infringement and invalidity.

Your job is to decide whether Defendants infringed the asserted claims of the '398 Patent and whether any of the asserted claims of that patent are invalid. If you decide that one or more of the claims of the '398 Patent has been infringed and is not invalid you will then need to decide any money damages to be awarded to GTT to compensate it for the infringement. You will also need to make a finding as to whether the infringement was willful. If you decide that there was infringement and that the infringement was willful, that decision should not affect any damages award you make. I will take willfulness into account later.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instruction B.1 (Summary of Contentions) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 2

The Role of the Claims of a Patent

Before you can decide many of the issues in this case, you will need to understand the role of patent "claims." The patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent's coverage. Each claim is effectively treated as if it were a separate patent, and each claim may cover more or less than another claim. Therefore, what a patent covers depends, in turn, on what each of its claims covers.

Before you can decide whether or not there is infringement of a claim or whether or not the claim is invalid, you will have to understand what each claim covers. The law says it is my role to define the terms of the claims, and it is your role to apply my definitions to the issues that you are asked to decide in this case. You must accept my definitions of any terms that I have defined as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including the issues of infringement and validity. For any words in the claims for which I have not provided you with a definition, you should apply their ordinary meaning. "Ordinary meaning" in this context, however, does not mean

the meaning you might apply based upon your everyday experience. Rather, “ordinary meaning” has a specific meaning in patent law. The ordinary meaning of claim terms for purposes of patent law means the ordinary and accustomed meaning as understood by a person of ordinary skill in the art in question at the time of the invention. I will explain what a person of “ordinary skill in the art” means shortly.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B 2.1 and 2.3 (The Role of the Claims of a Patent and Claim Interpretation) (modified); *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (“ordinary and customary meaning” is based on the understanding of a person of ordinary skill in the art in question at the time of the invention).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 3

How a Claim Defines What It Covers/Independent and Dependent Claims

I will now explain how a claim defines what it covers and how you should go about interpreting the claims at issue in this litigation.

A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. In patent law, the requirements of a claim are often referred to as “claim elements” or “claim limitations.” If a device or a method satisfies each of these requirements, then it is covered by the claim. If it does not satisfy each requirement, then it is not covered.

There can be several claims in a patent. Each claim may be narrower or broader than another claim by setting forth more or fewer requirements. The coverage of a patent is assessed claim-by-claim.

This case involves two types of patent claims: independent claims and dependent claims.

An “independent claim” sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. In this case, claims 1, 11 and 16 of the ‘398 Patent are independent claims.

The remainder of the claims in the ‘398 patent are “dependent claims.” A dependent claim does not itself recite all of the requirements of the claim but

refers to another claim for some of its requirements. In this way, the claim “depends” on another claim. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claim or claims to which it refers. A product or process that meets all of the requirements of both the dependent claim and the claim or claims to which it refers is covered by that dependent claim.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instructions 2.2, 2.2a (How a Claim Define What It Covers and Independent and Dependent Claims) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 4**Means Plus Function Requirements/Step Plus Function Requirements**

A number of the claims in the '398 Patent use the phrase "means for" in describing a function that is encompassed within the patent claim. This "means for" phrase has a special meaning in patent law. It is called a "means-plus-function" requirement.

Means-plus-function requirements involve a description of a "means" or a step for performing a particular function, rather than a description of the structure or the act that performs the function. For example, let's say that a patent describes a table in which the legs are glued to the tabletop. One way an inventor may claim the table as an invention is to require the tabletop, four legs, and glue between the legs and the tabletop. Another way to claim the table is to require the tabletop and the legs, but instead of stating "glue," the inventor states a "means for securing the legs to the tabletop." This second type of claim requirement is a means-plus-function requirement. It describes a means for performing the function of securing the legs to the tabletop rather than requiring the glue.

When a claim is expressed in means-plus-function form, it covers the structures described in the patent specification for performing the function stated in the claim, as well as any structure that is equivalent to the described structures. This requirement does not mean that any structure that could conceivably perform

the function stated in the claim is encompassed within the claim, however. Instead, the claim covers only structures or set of structures that perform the specified function and that are either identical or “equivalent” to the structure described in the ‘398 Patent for performing the function. The issue of whether two structures are identical or equivalent is for you to decide. I will explain to you later how to determine whether two structures or two sets of structures are “equivalent” to one another.

For purposes of this case, I have identified certain structures described in the ‘398 Patent that perform the function or functions set forth as requirements in means-plus function claims. You should apply my definition of the function and the related structure or set of structures described in the ‘398 Patent for performing that function, in the same way that you apply my definitions of any other claim term.

Claim 1 refers to “mapping means, associated with the location, for storing a plurality of positions corresponding to allowed approaches to the location and providing therefrom a map of allowed approaches.” The function set forth in this claim is “storing a plurality of positions corresponding to allowed approaches to the location and providing therefrom a map of allowed approaches.” The structure that corresponds to the performance of this function, as defined by the patent, is “map memory,” which I have construed to mean “computer map memory.”

Claim 1 also references the function of generating vehicle data at periodic intervals along a vehicle path where the vehicle data includes position data. The

structures for performing this function as described in the patent are (1) GPS Receiver and (2) Processor.

Claims 1 and 11 both refer to the function of transmitting vehicle data. The structures identified in the patent for performing this function are (1) Transmitter and (2) Antenna.

Claim 1 refers to the function of receiving vehicle data. The structures for performing this function identified in the patent are (1) Antenna and (2) Receiver.

Finally, Claim 11 refers to the function of receiving signals from a Global Positioning System and for generating therefrom vehicle data, wherein the vehicle data is generated at periodic interval positions along the vehicle path. The structures for performing this function are (1) GPS Receiver and (2) Processor.

A number of the claims in the '398 Patent also include step-plus-function requirements. These claims typically use the phrase "step for" and then describe a function to be performed. As is true of means-plus-function claims, this language does not mean that the claim covers all of the acts that could perform the described function. Instead, it covers only acts (i.e. steps) that are either identical or "equivalent" to the step described in the '398 Patent for performing that function.

Again, the issue of whether two steps are identical or equivalent is for you to decide using the definitions I have provided and the further instructions I will give you about what "equivalent" means in this context.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B 2.3a (Section 112, Paragraph 6) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 5**Method Claim – Order of Performance of Steps**

A method claim –that is, one that specifies a method or means for performing a function—may state explicitly that the steps encompassed in the claim must be performed in a certain order. In such cases, unless the allegedly infringing product or process uses all the same steps in the same order as the allegedly infringed claim, there is no infringement. Where a method claim does not recite an order for performing a particular function, the courts have developed a two-part test—which you should apply—for determining whether the claim’s steps must nonetheless be performed in the order in which they are written. First, in construing the claim, you should look to the claim language to determine if, as a matter of logic or grammar, the steps of the claim must be performed in the order written. If you conclude that this prong of the step is not satisfied, you should then look to the specification of the patent to determine whether it directly or implicitly requires that the steps be performed in a particular order. If neither prong of the test is met, the sequence in which the steps are written is not considered a requirement of the claim.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B 2.3a (Section 112, Paragraph 6) (modified); *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363 (Fed. Cir. 2000) (determination of whether order of steps is integral to method claim).

Defendants submit this instruction without waiving prior requests made in the Markman proceedings and as an integral part of the issues raised on summary judgment that the Court exercise its authority to construe disputed claims.

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 6

The Meaning of Claim Terms

GTT asserts that Defendants have infringed various claims of its '398 Patent. I will provide you a full copy of all claims for your deliberations rather than reading them to you now. I have, however, defined certain words and phrases that are used in the patent claims. During your deliberations, you must apply these meanings in construing the patent:

Claim 1 of the '398 Patent contains the phrase "associated with the location." I have determined that this phrase should be given its plain and ordinary meaning as understood by a person of ordinary skill in the art. I will describe for you what "plain and ordinary meaning as understood by a person of ordinary skill in the art" means in a separate instruction.

As I've previously explained, Claim 1 contains a means-plus-function requirement which refers to "mapping means, associated with the location, for storing a plurality of positions corresponding to allowed approaches to the location and providing therefrom a map of allowed approaches." The structure identified in the patent for performing the function of "storing a plurality of positions corresponding to allowed approaches to the location and providing therefrom a

map of allowed approaches” is “map memory.” I have construed the term “map memory” to mean “computer map memory.”

Claims 1, 2, 11, 16 and 18 refer to a “map of allowed approaches.” You should give this phrase its plain and ordinary meaning as understood by one of skill in the art. As I mentioned earlier, I will discuss with you what that means in greater detail shortly.

Claims 1 and 11 refer to “associated with the vehicle” and “associated with a vehicle.” I have determined that these phrases should be given their plain and ordinary meaning as understood by one skilled in the art, and I will tell you how to ascertain what that “plain and ordinary meaning” is shortly.

Claim 11 refers to “associated with an intersection;” and “associated with the intersection.” I have also determined that this phrase should be given its plain and ordinary meaning, meaning that you should give it the plain and ordinary meaning that one skilled in the art would understand it to have. I will explain how you should go about ascertaining this meaning in a few minutes.

Claims 1, 11, 16 and 17 refer to “transmitting the vehicle data;” and “transmitting vehicle data. I have determined that these phrases should be given their plain and ordinary meaning as understood by a person of ordinary skill in the art.

Finally Claim 11 refers to “an intersection module associated with an intersection and adapted to track the vehicle path, the intersection module comprising:” Again, I have determined that this phrase should be given its plain

and ordinary meaning as a person of skill in the art would understand that meaning.

Source: *See Global Traffic Technologies, LLC. v. Emtrac Systems, Inc., et al.* Civ. No. 10-4110 (D. Minn.) Memorandum Opinion and Order, dated July 13, 2012 (Markman ruling); *see also* National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.3.

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 7**Open-Ended or “Comprising” Claims/ “Consisting of” Claims**

The beginnings, or preambles, of certain of the asserted claims use the word “comprising.” “Comprising” means “including” or “containing but not limited to.” In order to infringe a patent claim that references a product or method “comprising” certain specified requirements or steps, the allegedly infringing product or method must include every one of the referenced requirements or steps. However, it would not matter that the accused product or method also included components or steps in addition to the claim’s requirements.

To illustrate, a claim to a table *comprising* a tabletop, legs, and glue would be infringed by a table that includes a tabletop, legs, and glue, even if the table also includes wheels on the table’s legs.

Claims that begin with the phrase “consisting of” have a very different meaning. “Consisting of” means that the claimed invention contains only what is expressly stated in the claim. A patent claim using the phrase “consisting of” will be infringed if you decide that the accused product or method includes all the requirements or steps stated in the patent claim and does not include any additional requirements or steps related to the invention.

Source: National Jury Instruction Project, Model Patent Jury Instructions, Instructions 3.3 and 3.6 (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 8**Claim Interpretation/ Person of Ordinary Skill in the Art**

As I have previously instructed, there are certain specific terms or phrases that I have decided are to be given their “plain and ordinary meaning.” By this, I do not mean that you should apply your own personal understanding of the terms or phrases or that that you should reach for a dictionary to define the term or phrases. Instead, you are to apply the “ordinary meaning” of a term or phrase as that word or phrase would be understood by a person of ordinary skill in the art in question at the time of the invention. What does this mean? In deciding what a person of ordinary skill in the art at the time of the invention would understand a term or phrase to mean you should consider all the evidence introduced at trial, including but not limited to: (1) the level of education and experience of the inventor and other persons actively working in the field of the invention; (2) the types of problems encountered in the field; (3) prior art solutions to those problems; (4) the rapidity with which innovations were made in the field; and (5) the sophistication of the technology.

The law presumes that a hypothetical person of ordinary skill in the art, through whose eyes a patent claim is deemed to be construed, will look first to what is known as “intrinsic evidence” in order to determine the meaning of a disputed term or phrase in a patent claim. Intrinsic evidence includes the patent’s

claims themselves, but also the rest of what is known as the patent specification, as well as the patent's prosecution history.

The specification is the written text in a patent that explains the invention and the drawings (if any) of the invention and that ends with the claims. In the specification, the inventor provides a description telling what the invention is, how it works, and how to make and use it so as to enable others skilled in the art to do so. The specification also explains what the inventor believed at the time of filing for the patent was the best way of making the invention. The patent specification is the single best guide to the meaning of a disputed term, and may act effectively as a dictionary defining a term expressly or by implication. In addition to the specification, however, the prosecution history may provide guidance as to what a term or phrase means. The prosecution history is the written record of proceedings between an applicant for a patent and the PTO, and includes the original patent application and any later communications between the PTO and the applicant.

If, but only if, you conclude that a person of ordinary skill in the art would be unable to determine the meaning of a disputed term through consideration of intrinsic evidence (that is the claims, the specification, and the prosecution history of the patent), then you should turn to extrinsic evidence to resolve any ambiguities. Extrinsic evidence is evidence which is external to the patent and file history, and includes expert testimony, inventor testimony, dictionaries, and technical treatises and articles. While dictionary definitions may be useful in

understanding the ordinary and customary meaning of words, they may be relied upon in claim interpretation only to the extent they do not conflict with the intrinsic evidence of a patent claim's meaning. Similarly, expert testimony that is clearly at odds with the claim construction mandated by the written record of the patent should be discounted.

The terms of a patent's claims are presumed to be used consistently throughout the patent, such that the usage of a term in one claim can often illuminate the meaning of the same term in other claims. On the other hand, when different words or phrases are used in separate claims, a difference in meaning is presumed.

Finally, a construction of a claim that gives meaning to all terms of the claim is to be preferred over one that does not.

Ultimately, the interpretation to be given to a patent term should be determined with a full understanding of what the inventors actually invented and the construction that stays true to the claim language and most naturally aligns with the patent's description of the invention.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B.4.3c(i) (Level of Ordinary Skill) (modified); *Geospan Corp. v. Pictometry Intern. Corp.*, 731 F. Supp.2d 858, 861-62 (D. Minn. 2010) (defining "person skilled in the art;" discussing importance of specification in construing disputed term; noting limitations of dictionary definitions); *Conoco, Inc. v. Energy & Environmental Intern., L.C.*, 460 F. 3d 1349, 1357 (Fed. Cir. 2006) (person of ordinary skill reads claim term in context of entire patent, including

specifications); *3M v. Moldex-Metric, Inc.*, 552 F. Supp.2d 921 (D. Minn. 2008) (specification is the single best guide to the meaning of a disputed term; ultimate object of patent interpretation to stay true to the claim language and align with patent's description of invention); *Ideal Instruments, Inc. v. Rivard Instruments, Inc.*, 498 F. Supp.2d 1131, 1151-54 (N.D. Iowa 2007) (in construing patent, dictionary definitions must correspond to intrinsic evidence; expert testimony that is at odds with intrinsic evidence should be discounted; patent terms are presumed to be used consistently throughout the patent); *3M Innovative Properties Co. v. DuPont Dow Elastomers, LLC*, 361 F. Supp.2d 958, 963 (D. Minn. 2005) (patent specifications may act as dictionary defining term expressly or by implication); *Merck & Co., Inc. v. Teva Pharmaceuticals USA, Inc.*, 595 F.3d 1364, 1372 (Fed. Cir. 2005) (patent claim construction preferred that gives meaning to all terms and renders none superfluous); *accord Electa Instruments SA v. O.U.R. Sci. Int'l Inc.*, 214 F.3d 1302-1307 (Fed. Cir. 2000)(construction that gives meaning to all terms preferred).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 9

Infringement Generally

I will now instruct you how to go about deciding whether or not Defendants infringed the '398 Patent. Infringement is assessed on a claim-by-claim basis. Therefore, there may be infringement as to one claim but no infringement as to another.

There a number of ways that a claim can be infringed. In this case, GTT has alleged both direct infringement and indirect infringement. There are two types of direct infringement – literal infringement and infringement under the doctrine of equivalents. Indirect infringement also encompasses two types of infringement -- active inducement and contributory infringement.

In order to prove infringement, GTT must prove that the requirements for one of more of these types of infringement are met by a preponderance of the evidence, i.e., that it is more likely than not that all of the requirements of one or more of each of these types of infringement have been proved.

I will explain each type of infringement.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instruction B.3.1 (Infringement Generally) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 10

Direct Infringement – Literal Infringement

There are two types of “direct infringement”: (1) literal infringement and (2) infringement under the doctrine of equivalents.

To determine whether there has been literal infringement in this case, you must decide whether Defendants have made, used, sold, or offered for sale within the United States a product or method covered by any of the claims of the ‘398 Patent. To make this determination, you must compare the claims in the patent to the features of the Emtrac Priority Control System.

In general, you must make a separate determination for each asserted claim as to whether or not there is infringement. (There is one exception to this rule which involves dependent claims, and I’ll explain that exception in a separate instruction.) To prove literal infringement of a particular claim in its ‘398 Patent, GTT must prove that it is more probable than not that the Emtrac Priority Control System includes every requirement or step in that claim. If the Emtrac Priority Control System omits even one requirement of a patent claim, Defendants have not infringed that claim.

For literal infringement, GTT is not required to prove that Defendants intended to infringe or even knew of GTT’s patent.

Source: National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.2 (Direct Infringement-Literal Infringement); *see also* Federal Circuit Bar Association Model Patent Jury Instructions, Instruction B.3.1a (Direct Infringement by “Literal Infringement”) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 11

Infringement of Dependent Claims

As I've previously discussed, the '398 Patent contains both independent and dependent claims. An independent claim does not refer to any other claim of the patent. In the case of the '398 Patent, claims 1, 11 and 16 are independent claims. A dependent claim refers to at least one other claim and requires all of the steps or limitations of the independent claims as well as those set in the dependent claim.

You are instructed that, as a matter of law, if you find that an independent claim is not infringed, then the dependent claims referring to it also cannot be infringed.

As a practical matter, what this means is that, in determining whether Defendants have infringed any of the dependent claims of the '398 Patent, you should first determine whether the related independent claim of the patent has been infringed. If you decide that the independent claim has not been infringed, then the dependent claim cannot have been infringed. If you decide that the independent claim has been infringed, however, you must then separately determine whether each additional requirement of the dependent claim has also been included in the accused product or method. If each additional requirement has been included, then – but only then – has the dependent claim been infringed.

GTT must prove that it is more probable than not that a patent claim has been infringed.

Source: National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.7 (Infringement of Dependent Claims) (modified). *See also* ;Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B 3.1a (Direct Infringement by “Literal Infringement”).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 12

Direct Infringement of Section 112, Paragraph 6 Claim Requirements

I have previously described for you that certain claims in this action include requirements in means-plus-function form.

As you will recall, means-plus-function requirements involve a description of a “means” or a step for performing a function, rather than a description of the structure or the act that performs the function. In the table hypothetical that I used earlier, a claim that recites a tabletop, legs and a means for securing the legs to the tabletop is a means-plus-function claim, with the “means for securing the legs to the tabletop” being the means-plus-function portion of the claim. When a claim requirement is in means-plus-function form, it covers the structure described in the patent specification for performing the function stated in the claim, and also any structure “equivalent” to the described structure.

The word “equivalent” has a particular meaning here, and I will explain that meaning in a minute.

Various claims of the ‘398 Patent include means-plus function requirements. To assist you in your deliberations, I have previously identified for you two things about the means-plus-function requirements in the disputed claims: first, the function that is performed, and, second, the structure disclosed in the

patent specification that corresponds to that function. You are to use this information in your deliberations.

To establish literal infringement of a claim that includes means-plus-function requirements, the patent holder must prove two things:

- 1, that the relevant structure in the accused device (or process) performs the identical function recited in the patent claim; and
- 2, that the accused device (or process) employs a structure identical or equivalent to the structure described in the patent.

Where the structure in the accused device and the structure disclosed in the patent specification are not identical, the patent holder has the burden of proving that it is more probable than not that the relevant structure in the accused device, as I have identified it for you, is equivalent to the disclosed structure in the patent.

What does it mean for two structures to be equivalent? Two structures are equivalent if a person of ordinary skill in the art would consider the differences between them to be insubstantial for performing the required function. One way to determine this is to look at whether or not the accused structure performs the identical function in substantially the same way to achieve substantially the same result as the structure set forth in the patent. Another way is to consider whether people of ordinary skill in the art believed that the structure of the accused product or method and the structure in the patent were interchangeable at the time the patent was issued by the PTO.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B 3.1b (Direct Infringement by “Literal Infringement” of Section 112, Paragraph 6 Claim Requirements) (modified); 35 U.S.C. §112, ¶ 6; National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.9 (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 13

Direct Infringement Under the Doctrine of Equivalents

A patent holder may establish direct infringement either by establishing literal infringement, as I have just described, or under what is known as the doctrine of equivalents.

Under the doctrine of equivalents, a product or process infringes a claim if the accused product or process contains elements or performs steps corresponding to each and every requirement of the asserted claim that is equivalent to, even though not literally met by, the accused product or process.

You may find that an element (in the case of a product) or a step (in the case of a process) is equivalent to a requirement of a claim that is not met literally if a person having ordinary skill in the field of technology of the patent would have considered the differences between them to be "insubstantial" or would have found that the structure (in the case of a product) or an action (in the case of a process): (1) performs substantially the same function and (2) works insubstantially the same way (3) to achieve substantially the same result as the requirement of the claim. In order for a structure or action to be considered interchangeable, the structure or action must have been known at the time of the alleged infringement to a person having ordinary skill in the field of technology of the patent. Interchangeability at the present time is not sufficient. In order to

prove infringement by “equivalents,” the patent holder must prove the equivalency of the structure or actions to an element of a claim by a preponderance of the evidence.

There are a number of limitations on the application of the doctrine of equivalents. One of those limitations is that the doctrine may not be used in a way that wholly eliminates a claim requirement. For example, if a patent claim includes a requirement that a claimed device must be nonmetallic, a patent holder may not assert the patent claim against a metallic device on the ground that a metallic device is equivalent to a nonmetallic device.

Source: Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B 3.1c (Direct Infringement Under the Doctrine of Equivalents); National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.8 (Direct Infringement-Doctrine of Equivalents) (modified); *Paine LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1308-09 (Fed. Cir. 2007) (doctrine of equivalents may not be applied to eliminate claim requirement).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 14

Direct Infringement of Section 112, Paragraph 6 Claim Requirements Under the Doctrine of Equivalents

As I have just described, in order to satisfy the doctrine of equivalents, an accused product or process must perform an “equivalent” function and have an “equivalent” structure to the requirements of an asserted claim.

In the case of a means-plus-function claim, if you find that the accused product or process has no structure that is either identical or equivalent to the structure defined in the patent specification for performing a function, then not only does the accused product not literally infringe the patent at issue, it does not infringe under the doctrine of equivalents either. This is so even if you find that the accused product or process has some other structure that performs the specific function defined in the patent. In other words, for a means-plus-function requirement, a determination that there is no “equivalent” structure for purposes of “literal infringement” also precludes you from finding direct infringement under the doctrine of equivalents.

Source: *See* Federal Circuit Bar Association Model Patent Jury Instructions, Instructions B 3.1c (Direct Infringement Under the Doctrine of Equivalents); National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.8 (Direct Infringement-Doctrine of Equivalents).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 15

That a System is Capable of Being Programmed to Infringe Does Not Establish Infringement

A patentee cannot prove direct infringement of a method claim merely by showing that the accused product or system is capable of being programmed so as to infringe the patent. Infringement requires “specific instances of direct infringement or that the accused device [or system] necessarily infringes the patent in suit.” Thus, unless a patent specifically claims the capability to perform an infringing function, the mere fact that an accused product or system of products could be programmed to infringe does not establish infringement.

Source: *Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d 984, 994-95 (Fed. Cir. 2009).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 16

Indirect Infringement

GTT alleges that Defendants also indirectly infringed the '398 Patent.

There are two types of indirect infringement: inducing infringement and contributory infringement. The act of encouraging or inducing others to infringe a patent is called "inducing infringement." The act of contributing to the infringement of others by, for example, supplying them with components for use in the patented invention, is called "contributory infringement."

Source: National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.10 (Indirect Infringement) 35 U.S.C. §271(b), (c).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 17

Indirect Infringement-Active Inducement

GTT alleges that Defendants are liable for infringement by actively inducing someone else to directly infringe the '398 Patent literally or under the doctrine of equivalents. As with direct infringement, you must determine whether there has been active inducement on a claim-by-claim basis.

A party induces patent infringement if it purposefully causes, urges, or encourages another to infringe the claims of a patent. Inducing infringement cannot occur unintentionally. This is different from direct infringement, which can occur unintentionally.

To prove that one or more of the Defendants induced patent infringement, GTT must prove that it is more probable than not that:

1. Defendants actively encouraged or instructed another person on how to use a product or perform a process in a way that infringes at least one patent claim;
2. Defendants knew of the '398 Patent at that time;
3. Defendants knew, or should have known, that the encouragement or instructions would result in infringement of at least one patent claim; and
4. the other person infringed at least that one patent claim.

GTT must also prove that the accused Defendant or Defendants had a specific intent to induce the infringement. In order to establish active inducement of infringement, it is not sufficient that the induced party itself directly infringes the claim. Nor is it sufficient that Defendants were aware of the acts by the induced party that allegedly constitute the direct infringement. Rather, you must find that they specifically intended that the induced party infringe the '398 patent, in order to find inducement of infringement.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction B.3.2 (Indirect Infringement—Active Inducement) (modified); National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.11 (Inducing Patent Infringement) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 18**Indirect Infringement-Contributory Infringement**

Contributory infringement occurs when a party with knowledge of the patent supplies a part, or a component, to another for use in a product, machine, or process that infringes a patent claim. The patent holder must prove that it is more probable than not that contributory infringement occurred.

An alleged infringer may be liable for contributory infringement of a claim if the patent holder proves by a preponderance of the evidence:

- 1) that the alleged infringer sold, offered to sell, or imported within the United States, a component of a product, or apparatus for use in a process, during the time the patent holder's patent was in force;
- 2) the component or apparatus has no substantial, noninfringing use;
- 3) the component or apparatus constitutes a material part of the invention;
- 4) the alleged infringer was aware of the patent and knew that the products or processes for which the component or apparatus had no other substantial use might be covered by a claim of the patent or might satisfy a claim of the patent under the doctrine of equivalents; and
- 5) the use for which the components were sold directly infringes the claim.

In order to prove contributory infringement, the patent holder must prove that each of the above requirements is met. This proof must be by a preponderance of the evidence, i.e., that it is more likely than not that each of the above requirements is met.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction B.3.3 (Indirect Infringement–Contributory Infringement) (modified); *see also* National Jury Instruction Project, Model Patent Jury Instructions, Instruction 3.12 (Contributory Infringement).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 19

Invalidity-Burden of Proof

A patent issued by the United States Patent and Trademark Office is presumed to be valid and, thus, a party challenging the patent bears the burden of proving that the patent is invalid. In this case, the presumption of validity requires that you accept that the '398 Patent's claims are valid and look to Defendants for clear and convincing evidence of facts that show that the claims are invalid. Ultimately, however, your decision about whether the patent is valid should be based upon your independent judgment regarding the evidence. You should not rely upon the Patent Office's decision.

The presumption of validity that attaches to patents is based on information actually considered by the Patent Examiners. If you find that information relevant to the validity of the '398 Patent was not before the Patent Office Examiners, you may consider this fact in determining how much weight you give to the PTO's decision to issue the patent.

I will now instruct you on the invalidity issues you should consider. To prove that any claim of a patent is invalid, Defendants must persuade you by clear and convincing evidence, i.e. you must be left with a clear conviction that the claim is invalid.

Source: 35 U.S.C. §282; *see generally* Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction B 4.1 (Invalidity-Burden of Proof); National Jury Instruction Project; Model Patent Jury Instructions, Instruction 5.1 (Invalidity-Generally).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 20

Written Description Requirement

The patent law contains certain requirements for the part of the patent called the specification. As you may recall, the specification of a patent is the written description telling what the invention is, how it works, how to make and use it so as to enable others skilled in the art to do so, and what the inventor believed at the time of filing to be the best way of making the invention.

Defendants contend that the '398 Patent is invalid for failure of the patent's specification to provide an adequate written description of the claimed invention. To succeed, Defendants must show by clear and convincing evidence that the specification fails to meet the law's requirements for written description of the invention.

The written description requirement is satisfied if a person of ordinary skill in the field of the invention, reading the patent application as originally filed, would recognize that the patent application described the invention of those claims, even though the description might not use the exact words found in the claims. The written description is satisfied if a person having ordinary skill reading the original patent application would have recognized that it describes the full scope of the claimed invention as it is finally claimed in the issued patent and

that the inventor actually possessed the full scope by the filing date of the original application.

The written description requirement may be satisfied by any combination of the words, structures, figures, diagrams, formulas, etc., contained in the patent application.

If you find that one or more of the claims challenged by Defendants lacked an adequate written description, you must find each such claim invalid.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction B 4.2a (Written Description Requirement) (modified); *see also* National Jury Instruction Project; Model Patent Jury Instructions, Instruction 5.2 (Written Description).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 21

Requirement of Definiteness of Claims

Under the patent laws, a patent's specification must conclude with "one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." It must describe the particular product or process claimed to have been invented, so that the public will know what the product or process is, and thereby be able to avoid infringing the claims. This requirement is called the definiteness requirement. That is, a person of ordinary skill in the art must be able to determine what the claims cover and what they do not cover.

If you find that Defendants have proven by clear and convincing evidence that one or more of the claims of the '398 Patent are indefinite because a person of ordinary skill in the art would not understand what is, and what is not, covered by the claims, you must then find that those claims are unenforceable and not valid.

Source: 35 U.S.C. § 112; *Beachcombers v. Wildewood Creative Products, Inc.*, 31 F.3d 1154, 1158 (Fed. Cir. 1994); *Union Pac. Resources Co. v. Chesapeake Energy Corp.*, 236 F.3d 684, 692 (Fed. Cir. 2001).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 22

Enablement

The patent law contains certain requirements for the part of the patent called the specification. Defendants contend that certain claims of the '398 Patent are invalid because the patent's specification does not contain a sufficiently full and clear description of how to make and use the full scope of the claimed invention. To prevail on this defense, Defendants must show by clear and convincing evidence that the '398 Patent does not contain a sufficiently full and clear description of the claimed invention. To be sufficiently full and clear, the description must contain enough information to have allowed a person having ordinary skill in the field of technology of the patent to make and use the full scope of the claimed invention at the time the patent application was filed. This is known as the "enablement" requirement. If a patent claim is not enabled, it is invalid.

In order to be enabling, the patent must permit persons having ordinary skill in the field to make and use the full scope of the claimed invention at the time of filing without having to conduct undue experimentation. The fact that some experimentation may be required for a skilled person to make or use the claimed invention does not mean that a patent's specification fails to meet the enablement

requirement. Factors you may consider in determining whether making the invention would require undue experimentation include:

- 1) the quantity of experimentation necessary;
- 2) the amount of direction or guidance disclosed in the patent;
- 3) the presence or absence of working examples in the patent;
- 4) the nature of the invention;
- 5) the state of the prior art;
- 6) the relative skill of those in the art;
- 7) the predictability of the art; and
- 8) the breadth of the claims.

No one or more of these factors is alone dispositive. Rather, you should weigh all of these factors and determine whether or not, in the context of this invention and the state of the art at the time of the original application, a person having ordinary skill would need to experiment unduly to make and use the full scope of the claimed invention.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction B 4.2b (Enablement) (modified); *see also* National Jury Instruction Project, Model Patent Jury Instructions, Instruction 5.2 (Enablement) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 23

Anticipation

A person cannot obtain a patent on an invention if someone else has already made the same invention. In other words, the invention must actually be “new.” In general, inventions are new when the identical product or process has not been made, used, or disclosed before. If an invention is not new, we say that it was “anticipated” by the prior art. An invention that is “anticipated” by the prior art is not entitled to patent protection. Anticipation must be determined on a claim-by-claim basis. To anticipate an invention, prior art must have been made, known, used, published, or patented either before the invention was made.

Here, Defendants contend that the ‘398 Patent is invalid because the claimed invention is anticipated by prior art. Defendants must convince you of this by clear and convincing evidence, i.e., that the evidence demonstrates with a high degree of probability that a claim is invalid.

There are a number of ways that Defendants can show that a patent claim was not new:

- 1) An invention is not new if it was known to or used by others in the United States before the date of the invention of the product or processes covered

by the '398 Patent. An invention is known when the information about it was reasonably accessible to the public on that date.

2) An invention is not new if it was already patented or described in a printed publication, anywhere in the world before the date of invention of the patented product or processes. A description is a "printed publication" only if it was publicly accessible.

3) An invention is not new if it was described in a published patent application filed by another in the United States before the date of the patented invention.

4) An invention is not new if the claimed invention was described in a patent granted on an application for patent by another filed in the United States and the application was filed before the date or reduction to practice or the filing date of the application for the '398 Patent.

5) An invention is not new if the invention was made by someone else in the United States before the invention was made by the patent holder and the other person did not abandon, suppress, or conceal the invention.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction 4.3b (Anticipation) (modified).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 24

Scope and Content of the Prior Art

In considering whether the claimed invention was anticipated at the time it was made you should consider the scope and content of what is called “prior art.”

The scope and content of prior art for deciding whether an invention was anticipated includes prior art in the same field as the claimed invention, regardless of the problem addressed by the item or reference, and prior art from different fields that a person of ordinary skill in the art using common sense might combine if familiar so as to solve the problem, like fitting together the pieces of a puzzle.

Prior art may include items that were publicly known or have been used or offered for sale, publications, or patents that disclose the claimed invention or elements of the claimed invention. To be prior art, the item or reference must have been made, known, used, published or patented either before the invention was made or more than one year before the filing date of the patent application. However, prior art does not include a publication that describes the inventor's own work and was published less than one year before the date of invention.

To anticipate a claim, each and every element of the claim must be present in a single item of prior art. For a claim to be invalid because it is not new, an alleged infringer must show that all of the requirements of the asserted claim were present in a single previous device or method that was known, used, or described

in a single previous printed publication or patent. Prior art does not have to use the same words as appear in the allegedly infringed patent in order to have anticipated a claim of that patent, but all of the requirements of the claim must have been disclosed, either stated expressly, or implied by a person having ordinary skill in the art in the technology of the invention, so that looking at that one reference, that person could make and use the claimed invention.

In determining whether a single item of prior art anticipates a patent claim, you should take into consideration not only what is expressly disclosed in the particular item of prior art, but also that which inherently resulted from its practice. This is called “inherency.” To establish inherency, the alleged infringer must establish by clear and convincing evidence that the prior art necessarily resulted in the missing descriptive matter and that it would be so recognized by a person of ordinary skill in the art at the time the patent application was filed. It is not required, however, that the person of ordinary skill would actually have recognized the inherent disclosure before the filing of the patent application. Thus, a prior use of the patented invention that was unrecognized and unappreciated can still be an invalidating anticipation.

Source: See Federal Circuit Bar Association, Model Patent Jury Instructions, Instructions B.4.3a, 4.3c(ii) (both modified); ABA Section of Litigation, *Model Jury Instructions: Patent Litigation* § 9.6(2005); American Intellectual Property Law Association (AIPLA), *Guide to Model Patent Jury Instructions*, § 6.0 (2008) available online at www.aipla.org/learning_center/ library/books /other-pubs...

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 25

Inventorship/ Date of Invention

An invention is not new if the invention was made by someone else in the United States before the invention was made by the patent holder, and the other person did not abandon, suppress, or conceal the invention.

In this case, there are two issues involving claims of prior inventorship. The first involves Defendants' contention that the '398 Patent is invalid because the invention claimed in the '398 patent was made by someone else in the United States (Brad Cross) before it was made by the patent holder. The second issue involves GTT's contention that, notwithstanding the January 7, 1994 date on its '398 Patent, its invention was conceived much earlier, in 1992.

You are entrusted with determining the date of invention of the prior art alleged by Defendants as anticipating GTT's '398 Patent and rendering it invalid. You must also determine whether GTT has proven that the date of invention of the product and processes claimed by the '398 Patent actually preceded the January 7, 1994 date reflected on its patent application.

The date of invention is either when the invention was reduced to practice or, alternatively, when the invention was conceived, provided the inventor was diligent in reducing the invention to practice. Reasonable diligence means that the inventor worked continuously on reducing the invention to practice, though not

necessarily every day. Interruptions necessitated by the everyday problems and obligations of the inventor or those working with him or her do not, for example, automatically preclude a finding of diligence. Reasonable diligence may be shown either by affirmative acts toward a reduction to practice of an invention or by a reasonable explanation for a delay in acting.

Conception is the mental part of an inventive act, i.e., the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention as it is thereafter to be applied in practice, even if the inventor did not know at the time that the invention would work. Conception of an invention is complete when the idea is so clearly defined in the inventor's mind that, if the idea were communicated to a person having ordinary skill in the field of technology, he or she would be able to reduce the invention to practice without undue research or experimentation. This requirement does not mean that the inventor has to have a prototype built, or actually explained her or his invention to another person. But, there must be some evidence beyond the inventor's own testimony that confirms the date on which the inventor had the complete idea. Conception may be proven then the invention is shown in its complete form by drawings, disclosure to another person, or other forms of evidence presented at trial.

Reduction to practice can be actual or constructive. Actual reduction to practice occurs when a claimed invention has been constructed, used, or tested sufficiently to show that it will work for its intended purpose of when the inventor

files a patent application. Constructive reduction to practice may occur even if the inventor has not made or tested a prototype of the invention if the invention has nonetheless been fully described in a filed patent application.

The final requirement for a prior invention to be considered prior art is that the prior inventor must not have abandoned, suppressed or concealed his or her invention. Generally, an invention is not abandoned, suppressed or concealed if the invention is made public, sold or offered for sale, or otherwise used for a commercial purpose. The filling of a patent application that discloses the invention is evidence that the invention was not abandoned, suppressed or concealed.

If you find that Defendants have established facts which, if accepted as true, could support a finding that the '398 Patent was invalid because it was made by someone else in the United States before the date claimed in the patent application, the burden of production then shifts to GTT to prove its entitlement to its claimed earlier invention date. While the burden of production shifts in this analysis, the ultimate burden of proving invalidity by clear and convincing evidence – i.e., the burden of persuasion – however, remains with the Defendants.

Source: 35 U.S.C. § 102(g); Federal Circuit Bar Association, Model Patent Jury Instructions, Instructions B.4.3a (excerpted and modified); Patent Law Basics §10.5 (reasonable diligence may be shown by affirmative acts or reasonable excuse for failure to act; question of diligence is considered in light of all the circumstances; diligence need not involve uninterrupted effort, nor the concentration of all of the applicant's energies upon the reduction of the invention in question to practice); *see generally Watkins v. Wakefield*, 332 F.2d 1207 (CCPA July 1, 1971)

(assignee of invention for an apparatus for use in offshore oil wells exercised continuous diligence notwithstanding delay in testing the device, given the uniqueness and complexity of the installation); *Taurus IP, LLC v. DaimlerChrysler Corp.* 2013 WL 4034384 at *9 (Fed. Cir. 2013) (shifting burden of production re claim of earlier invention) (citing *Innovative Scuba Concepts, Inc. v. FederIndus., Inc.*, 26 F.3d 1112, 1115 (Fed. Cir. 1995).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 26**Need for Independent Corroboration of Claims of Inventorship**

Where a party claims priority of inventorship, that party bears the burden of establishing when the conception of the alleged invention occurred. Because conception is a mental act, the law requires that a claim of inventorship be corroborated by independent evidence that establishes when the inventive process occurred. The purported inventor cannot simply rely on his own testimony to establish when he conceived the invention. Rather, he must corroborate his own testimony with independent evidence establishing that fact. The purpose of this requirement for corroboration is to provide an additional safeguard against courts being deceived by inventors who may be tempted to mischaracterize the events of the past through their testimony.

To establish conception, a purported inventor must be shown to have "disclosed to others his 'completed thought expressed in such clear terms as to enable those skilled in the art' to make the invention." Corroboration of this disclosure may take the form of testimony of an independent witness, or other evidence of an independent nature concerning the inventive process. Contemporaneous documents prepared by the purported inventor may provide corroboration of the purported inventor's claim of inventorship, but only if such documents are, themselves, corroborated in a way that establishes their

trustworthiness, An inventor's unwitnessed lab notebook, for example, cannot alone effect corroboration. Similarly, a co-inventor's statement or the statement of other persons with an interest in the invention or the purported inventor's claim cannot satisfy the requirement of corroboration.

Source: *See, e.g., In re Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1374 (Fed. Cir. 2009)(purpose of corroboration requirement is safeguard against courts being deceived by self-serving inventors); *In re Jolly*, 308 F.3d 1317, 1321 (Fed. Cir. 2002); *Procter & Gamble Co. v. Teva Pharmaceuticals, USA, Inc.*, 566 F.3d 989, 999 (Fed. Cir. 2009) (party seeking to prove conception needs more than his own statements and documents to establish inventorship; need for independent corroborating evidence); *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1170-71 (Fed. Cir. 2006)(inventor's unwitnessed notebook is insufficient on its own to support claim or reduction to practice); *Stern v. The Trustees of Columbia University in City of New York*, 434 F.3d 1375 (Fed. Cir. 2006) (unwitnessed laboratory notebooks on their own are insufficient to support claim of patent co-inventorship); *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985) (“conception must be proved by corroborating evidence which shows that the inventor “disclosed to others his ‘completed thought expressed in such clear terms as to enable those skilled in the art’ to make the invention”); *Checkpoint Systems, Inc. v. All-Tag Security, S.A.*, 412 F.3d 1331, 1339 (Fed. Cir. 2005) (corroboration requirement extends to claims by co-inventors).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 27

Multiple Inventors

To be an inventor, one must make a significant contribution to the conception of at least one, or more, of the claims of the patent. Conception is the mental formulation and disclosure by the inventor or inventors of a complete idea of the inventive solution. An inventive solution is considered to be a complete idea when disclosure of the idea would enable anyone with ordinary skill in the pertinent art to reduce the invention to practice. Whether a contribution is significant is measured against the scope of the full invention.

Persons may be inventors even if they do not make the same type or amount of contribution, and even if they do not contribute to the subject matter of each claim of the patent. Persons may also be joint or co-inventors even though they do not physically work together, as long as they have some open line of communication during or at approximately the time of their inventive effort. Thus, for example, one inventor may conceive of an invention, and then assign the invention to another person who further develops the invention and ultimately reduces it to practice.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instructions B.4.3d (Inventorship, excerpted and modified). National Jury Instruction Project; Model Patent Jury Instructions, Instruction 5.8 (excerpted); *see also Watkins v. Wakefield*, 443

F.2d 1207 (CCPA 1971) (where invention was conceived by one party and assigned to another who reduced it to practice, both parties were inventors).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 28

Obviousness

As I mentioned earlier, an inventor is not entitled to a patent if his or her invention would have been obvious to a person of ordinary skill in the field of the invention at the time the invention was made.

In this case, Defendants contend that certain claims of the '398 Patent are invalid as obvious. Unlike anticipation, obviousness may be shown by considering more than one item of prior art. The question is, would it have been obvious for a skilled person who knew of the prior art to make the claimed invention? If the answer is yes, then the patent claims are invalid. The person asserting obviousness has the burden of proving this defense to infringement by clear and convincing evidence.

Obviousness is determined from the perspective of a person of ordinary skill in the field of the invention at the time the patent application was filed. The question is whether, even if all the requirements of a patent claim cannot be found in a single prior art reference, a person of ordinary skill in the field of the invention who knew about all of the prior art would have come up with the claimed invention.

Inventions entitled to patent protection are frequently a combination of known elements which in hindsight seem preordained. In deciding obviousness,

however, you must avoid using hindsight. Instead, you must put yourself in the place of a person of ordinary skill at the time the invention was made. You must consider the level of ordinary skill in the art that someone would have had at the time the claimed invention was made, the scope and content of the prior art, and any differences between the prior art and the claimed invention.

The existence of every element of the claimed invention in the prior art does not necessarily prove obviousness. Most, if not all, inventions rely on building blocks of prior art. In considering whether a claimed invention is obvious, you may, but are not required to find obviousness, if you find that at the time of the claimed invention there was a reason that would have prompted a person having ordinary skill in the field to combine the known elements in a way the claimed invention does, taking into account such factors as:

- (1) whether the claimed invention was merely a predictable result of using prior art elements according to their known function;
- (2) whether the claimed invention provides an obvious solution to a known problem in the relevant field;
- (3) whether the prior art teaches or suggests the desirability of combining elements claimed in the invention;
- (4) whether the prior art teaches away from combining elements in the claimed invention;

(5) whether it would have been obvious to try the combination of elements, such as when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions; and

(6) whether the change resulted more from design incentives or other market forces.

The fact of near-simultaneous invention, though not itself determinative of statutory obviousness, is strong evidence of what constitutes the level of ordinary skill in the art.

Finally, in assessing obviousness, you should take into account objective indications of nonobviousness, such as the following:

- a. Commercial success of products covered by the patent claims or made by a process covered by the patent claims;
- b. A long-felt need for the invention;
- c. Failed attempts by others to make the invention; and
- d. Praise of the invention by the infringer or others in the field.

In determining whether the claimed invention of the '398 Patent was obvious, you should consider each claim separately.

Source: See Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction B 4.3c(Obviousness) (modified); see also National Jury Instruction Project; Model Patent Jury Instructions, Instruction 5.9 (Obviousness); *The Int'l Glass Co. v. United States*, 408 F.2d 395 (Ct. Cl. 1969) (“The fact of near-simultaneous invention, though not determinative of statutory obviousness, is strong evidence of what constitutes the level of ordinary skill in the art.”).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 29

Laches

Defendants contend that GTT is not entitled to recover damages for acts that occurred before it filed this lawsuit because (1) GTT delayed filing the lawsuit for an unreasonably long and inexcusable period of time, and (2) Defendants have been or will be prejudiced in a significant way due to GTT's delay in filing this lawsuit. This is referred to as laches. Defendants must prove delay and prejudice by a preponderance of the evidence.

Whether GTT's delay was unreasonably long and unjustified is a question that must be answered by considering the facts and circumstances as they existed during the period of delay. There is no minimum amount of delay required to establish laches. If suit was delayed for six years, a rebuttable presumption arises that the delay was unreasonable and unjustified, and that material prejudice resulted. This presumption shifts the burden to the patent holder to come forward with evidence to prove that the delay was justified or that material prejudice did not result. If the patent holder presents such evidence, the burden of proving laches remains with the alleged infringer. Laches may be found for delays of less than six years if there is proof of unreasonably long and unjustifiable delay causing material prejudice to the alleged infringer. The facts and circumstances that can justify a long delay can include:

- 1) being involved in other litigation during the period of delay;
- 2) being involved in negotiations with the alleged infringer during the period of delay;
- 3) poverty or illness during the period of delay;
- 4) being involved in a dispute about ownership of the patent during the period of the delay; or
- 5) minimal amounts of allegedly infringing activity by the alleged infringer during the period of delay.

If you find unreasonable and unjustified delay occurred, to find laches, you must also determine if Defendants suffered material prejudice as a result of the delay. Prejudice can be either evidentiary or economic. Whether Defendants suffered evidentiary prejudice is a question that must be answered by evaluating whether delay in filing this case resulted in Defendants not being able to present a full and fair defense on the merits to GTT's infringement claim. Not being able to present a full and fair defense can occur due to the loss of important records, the death or impairment of an important witness, the unreliability of memories about important events because they occurred in the distant past, or other similar types of things.

Economic prejudice is determined by whether or not the alleged infringer changed its economic position in a significant way during the period of delay resulting in losses beyond merely paying for infringement (such as if the alleged infringer could have switched to a noninfringing product if sued earlier) and also

whether the alleged infringer's losses as a result of that change in economic position likely would have been avoided if the patent holder had filed this lawsuit sooner.

In all scenarios though, the ultimate determination of whether laches should apply in this case is a question of fairness, given all the facts and circumstances. Thus, you may find that laches does not apply if there is no evidence establishing each of the three elements I have described (unreasonable delay, lack of excuse or justification, and significant prejudice). You may also find that even though all of the elements of laches have been proved, it should not, in fairness, apply, given all the facts and circumstances in this case.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instructions B.5.2 (Laches)

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 30

Equitable Estoppel

The owner of a patent may forfeit its right to any relief from an infringer where: (1) the patent holder communicates something in a misleading way to the infringing party about the lack of infringement or about not being sued; (2) the infringer relies upon the misleading communication from the patent holder; and (3) the infringer will be materially harmed if the patent holder is allowed to assert a claim relating to the issue that is inconsistent with the patent holder's prior misleading communication. This is referred to as an "equitable estoppel" and it is a defense that Defendants contend precludes any recovery by GTT in this lawsuit.

For purposes of equitable estoppel, material harm can be evidentiary or economic in form. Whether Defendants suffered any evidentiary harm is a question that must be answered by evaluating whether Defendants will be unable to present a full and fair defense on the merits of GTT's claims. Not being able to present a full and fair defense can occur due to the loss of important records, the death or impairment of an important witness, the unreliability of memories about important events because they occurred in the distant past, or other similar type of things. Whether Defendants suffered economic prejudice is a question that must be answered by evaluating whether Defendants changed their economic position as a result of their reliance on a misleading communication from GTT, resulting in

losses beyond merely paying for infringement (such as if Defendants could have switched to a noninfringing product if sued earlier) and whether losses as a result of any change in economic position could have been avoided.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instructions B.5.3 (Equitable Estoppel)(modified)

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 31

Damages Introduction

I will now instruct you on damages. If you find that Defendants have infringed one or more valid claims of the '398 Patent, you must determine the amount of money damages to which GTT is entitled. GTT must prove by a preponderance of the evidence the damages, if any, to which it is entitled.

By instructing you on damages, I do not suggest that one party or the other should prevail. These instructions are provided to guide you on the calculation of damages in the event you find infringement of a valid patent claim and thus must address the damages issue.

The amount of damages must be adequate to compensate the patent holder for any infringement, but it may not be less than a "reasonable royalty." At the same time, your damages determination must not include additional sums to punish an alleged infringer or to set an example. You may award compensatory damages only for the loss that the patent holder proves was more likely than not caused by the alleged infringement.

Where the parties dispute a matter concerning damages, it is the patent holder's burden to prove that it is more probable than not that its version is correct. The patent holder must prove the amount of damages with reasonable certainty, but need not prove the amount of damages with mathematical precision.

However, the patent holder is not entitled to damages that are remote or speculative.

Source: National Jury Instruction Project, Model Patent Jury Instructions, Instructions 6.1 (Damages – Generally); 6.2 (Damages –Burden of Proof)

Defendants respectfully submit that, in this case, whether GTT has complied with the marking requirement set forth in 35 U.S.C. § 287 is an issue of law, properly decided by the Court., because the relevant facts are not in dispute. GTT does not claim to have marked any of its products during the relevant time period nor does it contend that it could not have marked its products; it simply chose to mark the packaging instead. The express language of 35 U.S.C. § 287 does not permit this unilateral substitution. Consistent with the express language of the federal statute, then, GTT cannot recover damages for any time prior to the filing of this action, and the jury should be so instructed.

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 32

When Damages Begin/Marking

The amount of damages a patent holder can recover is limited to damages for those acts of infringement that occurred after the alleged infringer received notice of infringement.

In this regard, the relevant federal patent statute provides that:

Patentees, and persons making, offering for sale, or selling within the United States any patented article for or under them,...may give notice to the public that the same is patented, either by fixing thereon the word "patent" or the abbreviation "pat." together with the number of the patent, or by fixing thereon the word "patent" or the abbreviation "pat." together with an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent, or when, from the character of the article, this cannot be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

Notice of infringement may be actual or constructive, and I will now explain what that means.

Actual notice requires the affirmative communication by the patent holder to the alleged infringer of a specific charge of infringement by a specific product or device. To find that Defendants received actual notice of infringement, you must find that GTT provided specific notice of infringement of its patent to Defendants. Actual notice is effective as of the date given. The patent holder has the burden of establishing that it is more probable than not that the alleged infringer received actual notice of infringement on a specific date. The parties agree that GTT did not provide Defendants with actual notice of alleged infringement until it served and filed the complaint in this action.

Constructive notice requires that substantially all the products the patent holder made, offered for sale, or sold under its patent were marked as required by the patent statute. GTT has the burden of establishing compliance with the marking requirement. It must show that it is more probable than not that substantially all of the products it made, offered for sale, or sold under the '398 Patent were marked with the word "Patent" or "Pat." Along with the patent number as required by the statutory language I have read to you. Unless you find that GTT complied with the marking statute by marking substantially all of its patented products, Defendants can only be liable for infringement that occurred after the date they were put on actual notice of their alleged infringement.

If you find that (a) the ‘398 Patent is valid and (b) one or more of the Defendants infringed the ‘398 Patent, then your job will be to calculate damages from the date those Defendants received either actual or constructive notice, whichever came first. You should not award damages for any infringement that occurred before Defendants first received actual or constructive notice.

Source: 35 U.S.C. § 287; National Jury Instruction Project, Model Patent Jury Instructions, Instructions 6.3 (Damages – When Damages Begin) (modified); *see Am. Med. Sys., Inc. v. Med. Eng’g Corp.*, 6 F.3d 1523, 1538 (Fed. Cir. 1993) (purpose of marking statute is “to give patentees the proper incentive to mark their products and thus place the world on notice of the existence of the patent”); *Belden Techs. Inc. v. Superior Essex Commc’ns LP*, 733 F. Supp.2d 517, 534 (D. Del. 2010)(if :the patented article has markings or printing on it, other than the appropriate patent marking, then marking the package is not sufficient compliance with the [marking] statute;” *see also Rutherford v. Trim-Tex, Inc.*, 803 F. Supp. 158, 164 (N.D. Ill. 1992) (notice required by marking statute most effective when it can be easily seen by users); *Stryker Corp. v. Zimmer Inc.*, 2012 WL 6821683 at *3 (W.D. Mich. Nov. 29, 2012) (noting that courts have required that if there is physical space, the actual product should be marked); *Creative Pioneer Prods. Corp. v. K-Mart Corp.*, 1987 WL 54482 at *6 (S.D. Tex. 1987) (marking packaging insufficient where marking product “would have been a relatively simply matter”).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 33

Lost Profits Due to Lost Sales

In this case GTT seeks to recover lost profits resulting from Defendants' alleged infringement. One way a patent holder may establish lost profits is by proving it is more probable than not that had Defendants not infringed its patent, it would have made some or all of the sales made by Defendants. For GTT to recover lost profit damages, you must determine what someone who purchased the Emtrac Priority Control System would have done if the Emtrac system did not exist. If the evidence shows affirmatively that an entity that purchased the Emtrac system would not have purchased a similar product made and sold by GTT, then GTT may not recover lost profits with respect to sales made by Defendants to that entity.

One way that GTT can establish its entitlement to lost profits is by providing it is more probable than not that:

1. there was a demand for the claimed product or processes in the marketplace;
2. there were no available, acceptable, noninfringing substitute products or, if there were, the market share of the number of the sales made by Defendants that GTT would have made, despite the availability of other acceptable noninfringing substitutes;

3. GTT had the manufacturing and marketing capacity to make any infringing sales actually made by Defendants—in other words that GTT was capable of satisfying the demand; and
4. The amount of profit that GTT would have made if Defendants had not infringed.

By establishing each of these four elements, a patent holder creates an inference that “but for” the infringement by the alleged infringer, it would have made the profits that the alleged infringer made on sales of its infringing product. If the patent holder establishes this inference, then the burden shifts to the alleged infringer to show that GTT’s claim that it would have the sales for which it claims lost profits is unreasonable with respect to some or all of the sales at issue.

For purposes of the lost sales profits analysis, an alternative product may be considered “available” as a potential substitute even if the product was not actually on sale during the infringement period. Factors suggesting the alternative was available include whether the material, experience, and know-how for the alleged substitute were readily available at the time of infringement. Factors suggesting the alternative was not available include whether anyone wanting to market a potential substitute would have had to design or invent around the patented technology to develop a substitute, and how long it would have taken to produce this substitute.

If you find that GTT has not proven by a preponderance of the evidence lost profits damages, the law requires that you award GTT a reasonable royalty to

compensate it for any infringement. I will instruct you shortly how to determine a reasonable royalty.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction 6.2 (Lost Profits – “But For” Test)(modified); *see generally Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538 (Fed. Cir. 1999)(discussing *Panduit* test for establishing lost profits and shifting burden of proof)

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 34

Lost Profits –Price Erosion

In addition to lost profits due to lost sales, GTT seeks lost profits for price erosion.

A patent holder who has established infringement of a valid patent can recover damages in addition to damages reflecting lost sales if it can establish that it is more likely than not that, had there been no infringement, it would have been able to charge higher prices for the patented product.

If you find that GTT had established this fact, you may award GTT as additional damages the difference between:

- (A) the amount of profits GTT would have made by selling its product at the higher price; and
- (B) the amount of profits GTT actually made by selling its product at the lower price it actually charged for its product during the period of infringement.

This type of damage is referred to as price-erosion damage.

If you find that GTT suffered price-erosion as a result of Defendants' infringement, you may also use the higher price in determining GTT's lost profits from sales that were lost because of the infringement. In calculating GTT's total

losses from price erosion, you must take into account any drop in sales that would have resulted from charging a higher price.

You may also award as damages the amount of any increase in GTT's costs, such as additional marketing costs, caused by competition from the allegedly infringing product.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction 6.4 (Lost Profits – Price Erosion)(modified)

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 35

Reasonable Royalty

As I have mentioned previously, assuming infringement of a valid patent, the patent holder is entitled at a minimum to damages in the form of a reasonably royalty. I will now instruct you on how to go about calculating a reasonable royalty.

A royalty is payment made in exchange for rights to make use of a patent. A reasonable royalty is the payment that the patent holder and a hypothetical infringer would have agreed to in a hypothetical negotiation taking place at a time prior just before the time when the infringing sales first began. In considering this hypothetical negotiation, you should focus on what the expectations of the patent holder and the infringer would have been had they entered into an agreement at that time, and had they acted reasonably in their negotiations. In determining this, you must assume that both parties believed the patent was valid and infringed, and that the patent holder and infringer were willing to enter into an agreement.

The test is what royalty would have resulted from the hypothetical negotiation and not simply what either party would have preferred.

Evidence of things that happened after the infringement first began can be considered in determining a reasonable royalty only to the extent that the evidence aids in assessing what royalty would have been reached in the hypothetical

negotiation. Thus, evidence of the actual profits an alleged infringer made may be considered only to the extent they bear on the anticipated profits at the time of the hypothetical negotiation.

In determining the royalty that would have resulted from the hypothetical negotiation, you should consider the facts known and available to the parties at the time the infringement began. Some of the kinds of factors that you may consider in making your determination are:

- 1) the duration of the patent;
- 2) the established profitability of the product made under the patent, its commercial success, and its current popularity;
- 3) the relationship between the patent owner and alleged infringer, including whether or not they were competitors;
- 4) licensing practices in the relevant industry;
- 3) the utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results;
- 4) the portion of the realizable profits that should be credited to the invention as distinguished from nonpatented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer;
- 5) the opinion and testimony of qualified experts; and
- 6) any other economic factor that a normally prudent businessperson would, under similar circumstances, take into consideration in negotiating the hypothetical license.

This list is not exhaustive, and no one factor is dispositive. You can and should consider all the evidence that has been presented to you in this case on each of these factors and any other factors which in your mind would have increased or decreased the royalty the infringer would have been willing to pay and the patent holder would have been willing to accept, acting as normally prudent business people. In the end, your goal is to determine the payment that would have resulted from the hypothetical negotiation between a prudent patentee and a prudent licensee.

Source: Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction 6.6 (Reasonable Royalty-Defined) and 6.7 (Reasonable Royalty – Relevant Factors) (modified); National Jury Instruction Project, Model Patent Jury Instructions, Instruction

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 36**Willful Infringement**

GTT contends that Defendants willfully infringed the claims of GTT's '398 Patent. The determination of whether Defendants' infringement, if any, was willful does not affect the amount of damages, if any, that you may assess. The purpose of this determination is solely to aid me in making decisions that I will later be called upon to make after trial. You should not take this factor into account in assessing the damages, if any, to be awarded to GTT.

To establish willful infringement, a patentee must show by clear and convincing evidence two things: (1) that the infringer acted despite an objectively high likelihood that its actions constituted infringement of a valid patent – or, in other words, that a reasonable person in Defendants' position would have considered there to be a high likelihood of infringement of a valid patent at the time Defendants engaged in the infringing acts, and that, accordingly, the infringer's actions were objectively reckless; and (2) if this threshold objective standard is satisfied, the patentee must also demonstrate that this objectively-defined risk was either known or so obvious that it should have been known to the accused infringer.

With respect to the threshold objective determination, GTT must prove by clear and convincing evidence that, before the filing date of the complaint, the Defendants acted in reckless disregard of the claims of the '398 patent.

When considering Defendants' conduct, you must decide whether GTT has proven by clear and convincing evidence that it is highly probable that Defendants' conduct was reckless using an objective standard; that is, that Defendants proceeded with the allegedly infringing conduct with knowledge of the '398 Patent, and in the face of an unjustifiably high risk that they were infringing the claims of a valid and enforceable patent. Because this is an objective issue, Defendants' state of mind of Defendants is not relevant. In other words, for this prong of the analysis, whether Defendant believed that it was infringing is not relevant. That a reasonable litigant in Defendants' position would have concluded that Defendants had legitimate or credible defenses to infringement, even if ultimately not successful, may however, be relevant—though this fact, if established, is not alone dispositive—in establishing a lack of recklessness.

If you conclude that GTT has proven that Defendants' conduct was reckless, then you need to consider the second part of the test. You must determine whether GTT has proved it is highly probable that Defendants actually knew or should have known that their actions constituted an unjustifiably high risk of infringement of a valid and enforceable patent. To determine whether Defendant had this state of mind, consider all facts which may include, but are not limited to:

- 1) Whether or not Defendants acted in accordance with the standards of commerce for its industry;
- 2) Whether or not Defendants intentionally copied a product or process of GTT's that is covered by the '398 Patent;
- 3) Whether or not there is a reasonable basis to believe that Defendants did not infringe or had a reasonable defense to infringement;
- 4) Whether or not Defendants made a good faith effort to avoid infringing the '398 Patent, for example, whether they attempted to design around the patent; and
- 5) Whether or not Defendants tried to cover up the infringement.

The fact that the accused infringer did not obtain legal advice for purposes of determining whether it was infringing a patentee's patent does not give rise to an adverse inference either that any advice received would have been adverse to the accused infringer or that the accused infringer acted in reckless disregard as to whether its conduct was infringing. There is no affirmative obligation to obtain an opinion of counsel in order to oppose a claim of willful patent infringement.

The fact that I have instructed you on the issue of willfulness is only for your guidance and should not be construed in any way as indicating my view as to which party should prevail on any issue.

Source: See Federal Circuit Bar Association, Model Patent Jury Instructions, Instruction B 3.8 (Willful Infringement) (modified); National Jury Instruction Project; Model Patent Jury Instructions, Instruction 4.1 (Willful Infringement) (modified); *Bard Peripheral Vascular, Inc. v. W.L. Gore & Associates, Inc.*, 682 F.3d 1003, 1008 (Fed. Cir. 2012) (articulating test for objective recklessness in terms of reasonable person standard; noting specifically that "whether a reasonable litigant could realistically

expect defenses to succeed was relevant in determining whether infringer had acted with objective recklessness); *In re Seagate Technology, LLC*, 497 F.3d 1360 (Fed. Cir. 2007) (no affirmative obligation to obtain an opinion of counsel in order to oppose claim of willful patent infringement; no adverse inference from failure to seek opinion of counsel); *Knorr-Bremse Systeme Fuer Nutzfahrzeuge*, 383 F.3d 1337 (Fed. Cir. 2004) (adverse inference that legal opinion was or would have been unfavorable should not be drawn from patent infringement defendant's failure to consult with counsel).

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 37

Patent Infringement by Rodney K. Morgan

Emtrac Systems, Inc. was an Illinois corporation which was administratively dissolved on September 11, 2009, a fact which is not in dispute. Under Illinois law, in the event of an administrative dissolution, a corporation “may take all action ... necessary to wind up and liquidate its business and affairs....” 805 ILCS 5/12.40. Notwithstanding the foregoing, if an individual assumes and exercises corporate powers without authority, that individual may be held liable for all debts and liabilities incurred as a result thereof. 805 ILCS 5/3.20.

GTT contends that, after Emtrac Systems, Inc. was dissolved, Rodney K. Morgan assumed the corporate powers of Emtrac Systems, Inc. and engaged in activities in the name of Emtrac Systems, Inc. beyond those permitted under the Illinois Statutes, including activities which infringed upon the ‘398 Patent. As a result, GTT has alleged that Mr. Morgan is personally liable for infringement of the ‘398 Patent.

Defendants contend that Emtrac Systems, Inc. was engaged in virtually no business activities, whether during its existence or at any point after it was administratively dissolved, never sold any products, and was abandoned. Defendants have argued that, as principal of KME, any actions Mr. Morgan

undertook before, during, or after the existence of Emtrac Systems, Inc. was solely for the benefit of and on behalf of KME, and not Emtrac Systems, Inc.

In order for Rodney K. Morgan to be found liable for the debts and liabilities of Emtrac Systems, Inc., including for patent infringement, you must find that (1) Mr. Morgan carried on the business of Emtrac Systems, Inc. after its administrative dissolution and (2) his actions after the administrative dissolution of Emtrac Systems, Inc. constituted infringement of the '398 Patent.

Source: ILCS 5/3.20, 805 ILCS 5/12.30, 805 ILCS 5/12.40, 805 ILCS 5/12.75

DEFENDANTS' REQUESTED FINAL JURY INSTRUCTION NO. 38

Use of a Corporate Name as a Trademark

A business can use a word or phrase as a corporate name, as a trademark, or both.

Source: *Snap-on Tools Corp. v. Winkenweder & Ladd, Inc.*, 250 F.2d 154, 156 (7th Cir. 1957) (“The plaintiff, Snap-On Tools Corporation, is known in the trade and generally referred to by the contraction 'Snap-On,' which is also its principal trade-mark impressed in various styles on its products, catalogs, and brochures.”)